Worksheet for Planning Lot & Sublot Distribution of
QC/QA Superstructure Concrete in English Units

Contract No. _____   Total Plan Quantity of QC/QA Superstructure Concrete_____ yd^3

Number of CMD's required _____

First CMD to be used, __ of __			Second CMD to be used, __ of __		
Construction Phase	Structure No.	Plan Quantity yd^3	Construction Phase	Structure No.	Plan Quantity yd^3

$\Sigma =$ _____ yd^3 $\Sigma =$ _____ yd^3

$\div$ 150.0 yd^3 $\div$ 150.0 yd^3

_____   _____

1.   If decimal portion is less than 0.434, round the result down to nearest whole number to determine the number of Lots. The last Lot of a CMD will contain 3 or 4 Sublots

2.   If decimal portion is equal to or greater than 0.434, round the result up to the nearest whole number to determine the number of Lots. The last Lot of a CMD will be less than the standard quantity, consist of 2 or 3 Sublots, and likely will have one Sublot of partial size.

3.   An individual Sublot cannot contain less than 15.1 yd^3 or more than 65.0 yd^3.

4.   The last Lot for a CMD is required to have at least 2 Sublots, but never more than 4 Sublots.

CMD __ of __										
Sublot Nos.	Quantities (yd^3) within Lot Nos.									
	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
Σ										

CMD ___ of ___										
Sublot Nos.	Quantities (yd^3) within Lot Nos.									
	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
Σ										

INDIANA DEPARTMENT OF TRANSPORTATION
MATERIALS AND TEST DIVISION

RANDOM SAMPLING FOR SUPERSTRUCTURE CONCRETE
(ENGLISH UNITS)

Contract No. _____ Str. No. _____ Construction Phase ___ CMD ___ of _____

QC/QA Superstructure Quantity for Phase (z) _____ yd^3

Phase Construction Dimensions: Length (*l*) _____ ft, Width (w) _____ ft

Average Depth (d) = $\dfrac{z \times 27}{l \times w}$ = _____ ft

Lot No. ____ Lot Size _____ yd^3 Number of Sublots _____

Sublot No.	Sublot Size (yd^3)	Cumulative Quantity of Ph/Str (yd^3)	Remainder Quantity (yd^3)	Random No.	Random Quantity Within Sublot (yd^3)	Random Distance From Start of Ph/Str (ft)	Sublot Location	
							Begin (ft)	End (ft)
	A	B	z-B	C	$D = A \times C$	$\dfrac{(D-A+B)27}{w \times d}$		$\dfrac{27B}{w \times d}$
1								
2								
3								
4								

* Sublot information that carries over to the next construction phase or structure placement.

** Acceptance sample location will be obtained during next construction phase or structure placement.

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